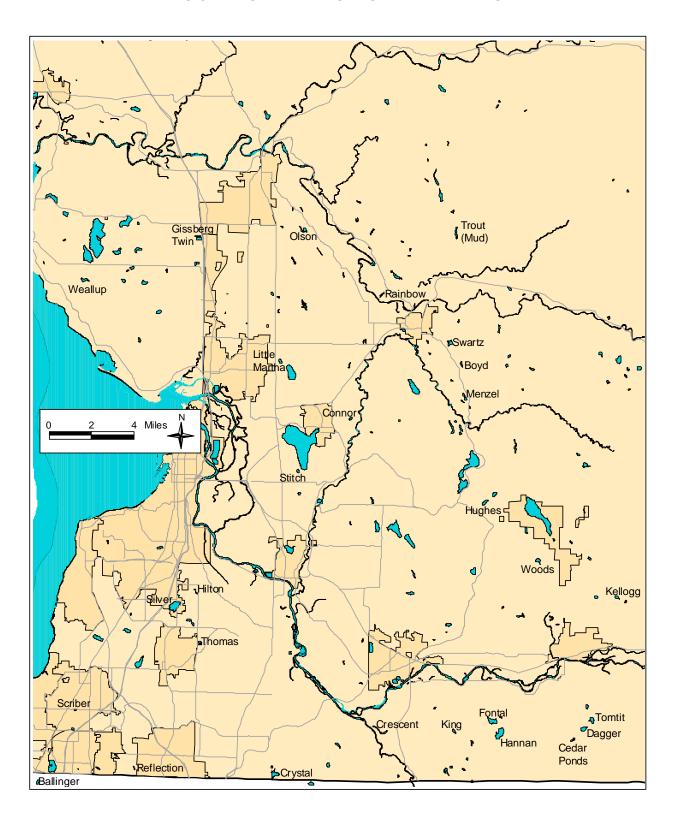


LOCATION MAP OF OTHER LAKES



SELECTED CHARACTERISTICS OF OTHER LAKES

	Area (acres)	Maximum Depth feet (meters)	Average Depth feet (meters)	Watershed (acres)	Public Access
BALLINGER	100	35 (10.7)	15 (4.6)	3258	PARK
BOYD	11	17 (5.2)	11 (3.4)	762	NO
CEDAR PONDS	9	25 (7.6)	-		NO
CONNOR	9	18 (5.5)	-		NO
CRESCENT	9	8 (2.4)	I		YES
CRYSTAL	54	33 (10.0)	13 (4.0)	2118	NO
DAGGER	32	42 (12.8)	21 (6.4)	730	NO
FONTAL	45	42 (12.8)	16 (4.9)	442	WALK-IN
GARDNER	10	8-10 (2.5-3.0)	:	218	PARK
GISSBERG TWIN	25	24 & 13 (7.3 & 4.0)	1		PARK
HANNAN	49	32 (9.8)	13 (4.0)	282	NO
HILTON	8	12 (3.7)	4 (1.2)		NO
HUGHES	21	33 (10.0)	19 (5.8)	576	NO
KELLOGG	16	23 (7.0)	13 (4.0)	1805	YES
KING	17	65 (19.8)	21 (6.4)	102	WALK-IN
LITTLE MARTHA	13				WALK-IN
MENZEL	18	24 (7.3)	15 (4.6)	1900	NO
OLSON	25	40 (12.2)?	I		NO
RAINBOW	8	6 (1.8)	-		NO
REFLECTION	3.5	18 (5.5)	I		NO
SCRIBER	3.3	22 (6.7)	.	1400	PARK
SILVER	110	51 (15.5)	24 (7.3)	948	PARK
STITCH	10	20 (6.0)	I		NO
SWARTZ	24	29 (8.8)	17 (5.2)	986	NO
THOMAS	8	13 (4.0)	10 (3.0)	474	NO
TOMTIT	26	20 (6.1)	10 (3.0)	1805	NO
TROUT (MUD)	29	12 (3.7)	6 (1.8)	825	NO
WEALLUP	23	12 (3.7)	7 (2.1)	5363	NO
WOODS	21	30 (9.1)	17 (5.2)	1030	?

<u>NOTE</u>

Primary sources of information are Bortleson et. al., 1976; Sumioka and Dion, 1985; Wolcott, 1965; and the Washington State Department of Fish and Wildlife website. Some data are unconfirmed.

SUMMARY OF OTHER LAKES

INTRODUCTION

There are numerous other lowland and foothill lakes in Snohomish County that are not included in the Surface Water Management lake monitoring program. Some of these lakes are located within incorporated cities. Many of the lakes have no public recreational access. However, all the lakes have homes located on the shoreline or are used by local residents for recreation.

Detailed water quality data are available for four of the lakes—Ballinger, Scriber, Silver, and Stitch. For the other lakes, the information is too limited to adequately evaluate lake conditions.

LAKE BALLINGER

■ – Lake Ballinger is located in Mountlake Terrace and Edmonds just north of the county line. The lake is 100 acres in size and relatively shallow. The lake is eutrophic and suffers from regular severe algal blooms caused by nutrients coming from the surrounding urbanized area and from the release of nutrients from the bottom sediments.

Monitoring data collected by and for the City of Mountlake Terrace (KCM, 1986 and Khan, 1993) revealed that water clarity is moderate, averaging 3.4 meters in the summer of 1985, 3.7 meters in 1990, and 4.2 meters in 1991. However, phosphorus concentrations are high, with a summer epilimnion total phosphorus average over 40 µg/l in 1985. Chlorophyll *a* values are also moderate to high, indicating vigorous algal growth.

Lake Ballinger is in better shape than during the early 1970s because the local cities (with Mountlake Terrace taking the lead) have carried out steps to reduce nutrient levels. The cities have made numerous improvements in the tributary stream and drainage systems to reduce nutrients. They also built a hypolimnetic injection and withdrawal system in 1982 and applied alum to the lake in 1990. These steps have reduced nutrient levels and improved water quality in the short term, but runoff from the large urbanized watershed still contributes to water quality problems.

BOYD LAKE

■ - Boyd Lake is located southeast of Granite Falls. The lake covers 11 acres and has a large



Lake Connor

rural watershed. Limited data from 1981 indicate that the lake had low water clarity, moderate nutrients, and moderate algae. The lake also appeared to have significant aquatic plant growth.

CEDAR PONDS

■ - Cedar Ponds is a 9 acre lake located in the forested foothills south of Sultan and the Skykomish River. There is a small group of homes around the lake. The lake has a maximum depth of about 7 meters. Limited data from 1993 and 1994 indicate that water clarity is moderate—at least 2.5 to 3.0 meters during the summer.

LAKE CONNOR

■ - Lake Connor is a small (9 acres) shallow lake located east of Lake Stevens. The lake drains into the Pilchuck River. A series of beaver dams partially blocks the lake outlet. There is a private recreational vehicle/camping park adjacent to the lake on the site of a former Scout camp.

No monitoring data are available for the lake. However, aquatic plants are abundant, and the lake appears to be eutrophic.

CRESCENT LAKE

■ - Crescent Lake is a long, narrow oxbow lake located in an abandoned river meander near the confluence of the Skykomish and Snoqualmie rivers. The lake lies on Washington State Department of Fish and Wildlife property. The lake is not deep and is being gradually filled with aquatic plants. However, it provides valuable fish and wildlife habitat.

CRYSTAL LAKE

■ - Crystal Lake is located south of Maltby adjacent to the Snohomish-King County line. The lake covers 54 acres and has a maximum depth of 10 meters. There are extensive wetlands north of the lake. A private, gated residential community surrounds the lake on the remaining three sides. The lake outlet is dammed and drains south to Cottage Lake and Bear Creek.

Data collected by the Crystal Lake community since the early 1980s and limited data collected by Snohomish County SWM in 1994-95 indicate that the lake has low water clarity (about 2 meters in 1994-95), moderate phosphorus levels, and moderate to high chlorophyll *a* values. The lake also supports dense growths of native aquatic plants, which are treated regularly with herbicides to reduce plant densities. It appears that the lake could be classified as eutrophic.

DAGGER LAKE

■ – Dagger Lake is 32 acres in size, with a maximum depth of 12.8 meters. The lake is located in the foothills south of Sultan and the Skykomish River. The lake is undeveloped and surrounded by forest lands, some of which have been recently logged. Limited data from 1974 indicate that the lake had moderate water clarity and low nutrient levels. Logs and wood debris are scattered along the shoreline.

LAKE FONTAL

■ - Lake Fontal is located in the foothills southeast of Monroe. The lake drains north into the Skykomish River. Forest lands, some of which have been recently logged, surround the lake. Lake Fontal covers 45 acres and has a maximum depth of 12.8 meters. Limited data from 1973 indicate that the lake had moderate water clarity, moderate nutrient levels, and dense aquatic plants.

GARDNER LAKE

■ - Gardner Lake is located on the west edge of Granite Falls. The lake is an old mill pond now dammed by Ray Gray Road. The lake covers about 10 acres and is relatively shallow—only 2.5 to 3.0 meters maximum depth. There is a new city park on the lake, which has become a popular spot for fishing. No water quality data are available, however, the lake appears to have moderate to dense algae and aquatic plant growth.



Crystal Lake

GISSBERG TWIN LAKES

■ - Gissberg Twin Lakes consist of two adjacent rectangular lakes excavated during construction of Interstate 5. The lakes are owned and operated by Snohomish County as a county park. Fishing and other recreational uses are heavy because of the lakes' convenient location next to the freeway and the easy access to the lake shores.

Together the lakes cover about 25 acres. Both lakes are shallow, have relatively flat bottoms, and are filled by ground water. The north lake has a maximum depth of about 7 meters while the south lake is up to 4 meters deep.

Limited monitoring data from 2000 indicate that the lakes have high water clarity and low phosphorus levels. The lakes support moderate densities of aquatic plants. These characteristics are consistent with the young age of the lakes.

LAKE HANNAN

■ - Lake Hannan is located in the forested foothills southeast of Monroe near Fontal Lake. The lake is 49 acres in size, with a maximum depth of about 10 meters. Limited data from 1973 indicate that the lake had moderate water clarity, moderate nutrient levels, and dense aquatic plants.

HILTON LAKE

■ - Hilton Lake is actually two small connected lakes located in a residential area just southeast of Everett. The lake covers a total of almost 8 acres. The south basin is 3.5 meters deep, while the north basin is only 2.5 meters deep. No water quality data are available for the lake. However, the lake supports dense growths of aquatic plants and experiences regular algal blooms.

HUGHES LAKE

■ - Hughes Lake is a 21 acre lake located southeast of Lake Roesiger. There is a Scout camp on the lake, but no other development. The lake has a maximum depth of 10 meters. Limited data from 1974 indicate that the lake had low water clarity, moderate nutrient levels, and moderate aquatic plant growth. Logs and wood debris are scattered along the shoreline.

KELLOGG LAKE

■ - Kellogg Lake is located in the Cascade foothills northeast of Sultan. The lake consists of two basins joined by a shallow channel. The total lake covers about 16 acres. The deeper west basin is 7 meters deep. Data from one date in 1974 indicate that the lake had moderate water clarity, moderate nutrient levels, and dense aquatic plants. The lake has a large forested watershed with wetlands immediately around the shore. The lake appears to be filling with plants and sediment.

KING LAKE

■ - King Lake is a 17 acre lake located in the foothills southeast of Monroe. Forest lands, some of which have been recently logged, surround the lake. The lake is quite deep, with a maximum depth of almost 20 meters. Data from one date in 1972 indicate that the lake had moderate water clarity, moderate nutrient levels, and moderate aquatic plants.

LITTLE MARTHA LAKE

■ - Little Martha Lake is located north of Lake Cassidy and just east of Highway 9. The lake is surrounded by forest and wetlands and drains south into Lake Cassidy. Snohomish County Parks owns much of the land bordering the lake. The water is darkly colored, typical of a bog. Limited monitoring data from 1995 and 1996 indicate that the lake has very low water clarity.

MENZEL LAKE

■ - Menzel Lake is an 18 acre lake located southeast of Granite Falls. The lake has a maximum depth of about 7 meters. Most of the shoreline is undeveloped except for agricultural uses around the north end. A large watershed drains into the lake. Limited data from 1973 indicate that the lake had moderate water clarity,



Kellogg Lake

moderate nutrient levels, and moderate aquatic plant growth.

OLSON LAKE

■ – Olson Lake is a bog lake with an irregular shoreline located in a rural area southeast of Arlington near Burn Road. The lake covers about 25 acres, although the encroaching wetlands have left little open water. Unconfirmed information suggests that the lake was as much as 12 meters deep in the 1960s. Limited monitoring data from 1994 and 1998 indicate that the lake has low water clarity and abundant aquatic plants growing in the shallow water areas.

RAINBOW LAKE

■ - Rainbow Lake is a small (8 acre) man-made lake located in a residential area just across the South Fork Stillaguamish River northwest of Granite Falls. The lake is shallow, with a maximum depth of about 1.8 meters. Limited monitoring data from 1993 indicate that the lake has darkly colored water, low water clarity, and abundant aquatic plants.

REFLECTION LAKE

■ Reflection Lake is a 3.5 acre lake located in the middle of the private Wandering Creek residential community between Bothell and Brier. The lake is a former gravel pit now filled with water. The lake has a maximum depth of about 5.5 meters. Monitoring data collected by the community indicate that the lake has high nutrient levels.

Reflection Lake suffers from nuisance algae and dense aquatic plant growth. The community has installed an aeration system and applied aquatic herbicides in attempts to address these problems.

SCRIBER LAKE

■ – Scriber Lake is located in Scriber Lake Park in the City of Lynnwood next to 196th Street S.W. The lake is a bog lake with the main body of water separated from the north lagoon by a floating wedge of peat. The total water area is approximately 3.3 acres, and the main lake has a maximum depth of 6.7 meters.

A 1985 study (URS, 1986) found that the lake is eutrophic, with low water clarity (1.3 meters summer average), high nutrient levels, and very high chlorophyll *a* values (indicating abundant algae). Also, the lake supports dense growths of aquatic plants.

The study concluded that the poor water quality was partly the result of runoff from the lake's large urbanized watershed. The City has implemented a number of measures, including an aeration system, oil/water separators, and the addition of dilution water, to help protect and restore the lake.

SILVER LAKE

■ - Silver Lake is located in the City of Everett just east of Interstate 5. The surrounding watershed is heavily urbanized and developing rapidly. A City park provides access to the lake. Silver Lake covers 110 acres and is relatively deep (15.5 meters maximum.

A 1986-87 study (Welch et. al., 1988) found that the lake was oligo-mesotrophic, with moderate to high water clarity (summer average 4.3 meters), low nutrient levels, and low to moderate algal growth. The lake supports sparse to moderate densities of aquatic plants.

The primary concern with Silver Lake is the potential for water quality impacts from continuing development in the watershed. The City has taken steps to help control runoff and nutrients entering the lake. In addition, since the early 1990s, the City has been battling to eradicate an infestation of Eurasian watermilfoil, a noxious invasive aquatic plant, from the lake.

STITCH LAKE

■ - Stitch Lake is located near the south end of Lake Stevens and is one of the main tributaries to Stevens. The lake covers about 10 acres and has a maximum depth near 6 meters. Monitoring data



Swartz Lake

collected by Drainage Improvement District #8 since 1997 indicate that the lake is eutrophic, with darkly colored water, low water clarity, high nutrient levels, and abundant algae.

SWARTZ LAKE

■ - Swartz Lake is a 24 acre lake located in a rural area southeast of Granite Falls. The lake has a maximum depth of 8.8 meters and a shallow wetland fringe around the north and northwest shores.

Monitoring data indicate that the lake is mesotrophic, with moderate water clarity (2.4 meters in 1981, an average of 4.6 meters in 1992, and 3.8 meters in 1994 and 1996). The lake had moderate nutrient and algae levels in 1981.

The lake supports dense growths of aquatic plants, dominated throughout the shallow water areas by Brazilian elodea, a noxious invasive plant. No efforts have been made to control the Brazilian elodea because Swartz Lake has no public access. However, the presence of this plant is a potential threat to other lakes in the county.

THOMAS LAKE

■ - Thomas Lake is a eutrophic peat bog lake located east of Mill Creek near 35th Avenue S.E. The lake receives runoff from Silver and Ruggs lakes and drains through Penny Creek to North Creek. The lake is 8 acres in size and shallow (4.0 meters maximum depth). Data from one date in 1981 indicate that the lake had low water clarity (partly because of the dark water color), high nutrient levels, and very high levels of algae.

TOMTIT LAKE

■ - Tomtit Lake is located in the forested foothills south of Sultan and the Skykomish River. The lake covers 26 acres and has a maximum depth of 6.1 meters. Limited data from 1973 indicate that the lake had high water clarity, low nutrient levels, and dense aquatic plants.

TROUT (MUD) LAKE

■ - Trout (or Mud) Lake is located in the foothills northeast of Granite Falls and drains south to Canyon Creek and the South Fork Stillaguamish River. The lake covers 29 acres and is quite shallow (maximum depth of 3.7 meters). Monitoring data from one date in 1981 indicate that the lake had moderate water clarity (visibility extended to the lake bottom), moderate nutrient levels, and dense aquatic plant growth.

LAKE WEALLUP

■ - Lake Weallup is located on the Tulalip Indian Reservation. Recreational lots of the private Port Susan Camping Club surround the lake. Lake Weallup is 23 acres in size and quite shallow (maximum depth of 3.7 meters). The lake has a large watershed, receiving drainage from Lake Shoecraft and three of the other Seven Lakes. The lake outlet flows through Tulalip Creek to Possession Sound. Data from one date in 1973 indicate that the lake is eutrophic, with low water clarity, high nutrient levels, and dense aquatic plants.

WOODS LAKE

■ - Woods Lake is located in the foothills north of Sultan and is surrounded by forest lands. The lake covers 21 acres and has a maximum depth of 9.1 meters. Monitoring data from one date in 1974 indicate that the lake had darkly colored water, low water clarity, moderate nutrients, and dense aquatic plants.



Lake Weallup

HOW YOU CAN HELP YOUR LAKE

- Educate yourself about lake ecology and the lake's health.
- Use lawn and garden fertilizers sparingly; test your soil first; choose low or no phosphorus fertilizers.
- Retain or plant native vegetation adjacent to the water to protect the shoreline and filter pollution.
- Infiltrate or filter the runoff from rooftops, patios, and driveways rather than piping it to the lake.





- Cover or mulch bare soil areas.
- Use pesticides, herbicides, and household chemicals sparingly and never near the water.
- Maintain your septic system—have it inspected every two years and pumped when needed.
- Conserve water both inside and outside.
- Clean up pet wastes and keep livestock away from the lake shore.
- Learn to identify non-native invasive aquatic plants and animals; check your boat and trailer for invaders; never empty an aquarium into the lake.
- Do not feed geese or ducks.
- Join with neighbors or the local property owners' association to work together to protect the lake.



Contact Snohomish County Surface Water Management at 425-388-3464 for information about these topics or if you have questions about your lake.

(TTY users call 425-388-3700)

